

On the cover

8 Dirty secret

Pollution from rail vard emissions in the Chicago area plagues the health of nearby residents.

12 Tests reveal unsafe air at Union Station

Rail commuters are exposed to particulate matter at levels far exceeding what the U.S. Environmental Protection Agency considers safe.

15 An idle question

Illinois company develops engine to reduce emissions.

Departments

Editor's Note/News	3
Spinoffs	4
Q&A	
Parting Shot	16

Cover illustration by Andrew Skwish

Diesel exhaust from rail yards can be of particular concern to the health of people living nearby. **Photo by Robert Thornton.**

In the next issue

In its March/April issue, The Chicago Reporter will look at home loan modifications. During a time when the number of home foreclosures is increasing, the story will examine whether people who are seeking relief from unaffordable mortgages are getting them. It will look at who is applying for loan modifications, who is getting them and where the modifications are most often occurring.

Got a news tip?

The Chicago Reporter brings injustice to the forefront in the areas of criminal justice, labor, housing, health, immigration and government. If you have a tip, call (312) 427-4830 x4040 or e-mail editor@chicagoreporter.com.

THE CHICAGO

Founded in 1972, the Reporter is an investigative bimonthly that identifies, analyzes and reports on the social, economic and political issues of metropolitan Chicago with a focus on race and poverty.

It is supported by grants from the John D. $\,$ and Catherine T. MacArthur Foundation, The Chicago Community Trust, Ford Foundation, Lloyd A. Fry Foundation, McCormick Foundation, Woods Fund of Chicago, Richard H. Driehaus Foundation, Chicago Tribune Foundation, The Fund for Investigative Journalism, Inc., The Benton Family Foundation, and by subscriptions and individual contributions.

332 S. Michigan Ave., Suite 500 Chicago, Illinois 60604 (312) 427-4830 Fax: (312) 427-6130 editor@chicagoreporter.com

www.chicagoreporter.com

FOUNDER

John A. McDermott

PUBLISHER

Alden K. Loury

EDITOR

Kimbriell Kelly

MANAGING EDITOR

Rui Kaneya

PRESENTATION EDITOR

Christine Wachter

REPORTERS

Jeff Kelly Lowenstein Kelly Virella

COPY EDITOR

Stacie Williams

INTERNS

Jeff Biertzer **Christopher Pratt** Chris Danzig R. Thomas Amalia Oulahan

EDITORS & PUBLISHERS EMERITI

Alysia Tate Laura S. Washington Roy Larson

THE REPORTER READERS BUREAU

Hiranmayi Bhatt Michael Maranda Mandy Burrell Booth Justin Massa Michael Cho Gordon Mayer Thom Clark Joseph McCoy Nancy Day DeAnna McLeary Al DeBonnett Pamela Moss-Jones Fernando Diaz David Mussatt Mike Doyle Yvonne Nieves Sallie Gaines Bud Ogle Anel Gonzalez Elce Redmond **Geraldine Smith** Rav Hanania Robert Honesty **Charles Talbert** Jesse Knox Lourdes Vazquez Dan Lewis Whitney Woodward

Published by the Community Renewal Society Rev. Calvin S. Morris, executive director ISSN 0300-6921. Copyright 2010. All rights reserved.

Waiting to inhale

I stood on a platform the other day waiting for the Metra train to open its doors and thought about strapping on one of those white surgical masks made popular during the H1N1 epidemic.

My fear wasn't about contracting a deadly influenza or passing out from the nauseating fumes straying from the stuffed onboard toilets. It came to me after reading this month's cover story, "Dirty Secret," by Kari Lydersen.

It's no surprise that trains emit toxic emissions from the diesel they burn as they idle in rail yards while workers are loading and unloading domestic and foreign freight. The health impacts can be great—from causing cancer to exacerbating asthma and other respiratory conditions leading to premature death.

As Lydersen explores, people living by rail yards are nearer to the most toxic emissions. In the Chicago area, a majority of the residents are minorities.

But this is not solely a NIMBY (not in my backyard) issue. Commuters also inhale these toxins while standing on train platforms at Union Station in a blue haze of diesel fumes. Commuters are also impacted as they ride to and from work, inhaling the leftover fumes that are often



Kimbriell Kelly **Editor**

Opinions expressed by the editor are her own.

We welcome letters. Send them to kkelly@chicagoreporter.com or 332 S. Michigan Ave., Suite 500, Chicago, IL, 60604. Please include name, address and a daytime phone number. Letters may be edited for space and clarity.

trapped inside the train cars.

I've been riding the Metra since I was a teenager. It was a short half-hour ride back then. These days, my commute is much longer. I was afraid to calculate the number of hours I've spent inhaling toxic fumes. In total, I spend nearly one month on the train annually, an estimated 30,500 minutes or 508 hours each year.

Government agencies have started paying attention, and there's some relief on the way. By 2012, locomotives will be required to use cleaner fuel and will be subjected to new emissions standards depending on their age.

But the strictest new rules only apply to new trains. Some emissions improvements are required of older, existing locomotives—but not near enough. The U.S. Environmental Protection Agency's emissions reduction schedule for existing locomotives is mild compared to what is required of new locomotives. And engines built before 1973 will be allowed to continue spewing toxic emissions with no controls—indefinitely. Perhaps they shouldn't.

It's probably expensive to subject every locomotive to the strictest rule. And I understand that some change is probably better than nothing, particularly since the goal seems to be to reduce emissions, not necessarily to eliminate them.

But I wonder if rail execs and politicians would think differently if they were standing on these platforms or if these trains were idling in their backyards, polluting the very air their children breathe.

Letter to the Editor

The story in October about Chicago Reporter staff testifying about nursing home inequities reminded me about other recent articles about nursing home problems.

The Reporter's investigation revealed that Illinois has a lot of poorly rated black nursing homes, but the problems aren't just limited to those in black areas.

Many of these nursing homes have been found to be housing mentally ill felons without adequate safeguards to protect their elderly residents. These places are called nursing homes. When I think of the term home, the first thing that comes to mind is privacy and security.

Putting mentally ill felons into the same facility as our family members without adequate safeguards to protect them is just a gamble on their life every day. That is not what I think of when the term home comes to mind. and that is not what our senior citizens deserve.

I hope the Reporter's testimony focuses on the problems of all nursing homes and how we can keep our most defenseless members of our society safe.

Brian Meslar, Chicago Ridge

Reporter News

Editor Kimbriell Kelly and Reporter Jeff Kelly Lowenstein delivered testimony during a joint hearing of the Illinois Senate's Public Health and Human Services committees held on Nov. 5. Kelly and Kelly Lowenstein shared details of The Chicago Reporter's nursing home investigation, highlighting racial disparities in quality ratings, staffing and safety measures among the state's nearly 800 nursing homes.

Journalists, academics and community activists from at least five states have sought the Reporter's data analyses from its nursing homes investigation. The requests have focused on data that illuminate racial disparities in nursing home ratings for quality and safety between majority-black nursing homes and majority-white nursing homes.

Copy Editor **Stacie Williams** has left the Reporter. On a freelance basis, Williams has served as the Reporter's copy editor since 2007. She is moving to Boston where she will pursue a master's degree in library science at Simmons College's Graduate School of Library and Information Science.

Williams first joined the Reporter in 2005 as a writer. She left the Reporter

to join the staff of Modern Healthcare as a full-time copy editor but continued to contribute to the Reporter as a freelance writer. As copy editor, Williams penned cover text, headlines and subheads and proofread copy for the entire print magazine. We wish her well in her new endeavor.

Citing a reassessment of its funding priorities, The Chicago Community **Trust** discontinued support of *Chicago* Matters, a public information series with programming by WTTW11, Chicago Public Radio, the Chicago Public Library and the Reporter. The Reporter had been involved since 1997.

Suicides at varying rates

The news:

In November, Chicago Board of Education President Michael W. Scott died from a self-inflicted gunshot wound.

Behind the news:

According to the Chicago Department of Public Health, 157 Chicagoans committed suicide, at a rate of 5.7 suicides per 100,000 in 2006, the latest year for which the data are available. The highest rate was recorded among white people, with a rate of 10.1 suicides per 100,000, while African Americans and Latinos committed suicides at rates of 5.1 and 2.5 per 100,000, respectively.

The rates may be different, but the issue of suicides affects all races and communities, said Charles Rubey, director and founder of Loving Outreach to Survivors of Suicide, a support group for those who are grieving the suicide of a loved one.

"Most of our calls are from the Caucasian community, and it could be a cultural issue," said Rubey. "Shame and [mental] illness in African-American and Hispanic communities and how those communities react to these may prevent people from coming forward [for help]."

Edmond Yomtoob, president of the Illinois Chapter of the American Foundation for Suicide Prevention, said people who commit suicide are often mentally ill and have an acute sense of isolation, and that community differences can affect suicide rates.

"African-American and Latino communities are quite strong even though they have other problems like crime their strengths are community support and resiliency," Yomtoob said.

—Jeff Biertzer

More struggling with hunger



New research shows that millions of people in the U.S. didn't have enough food last year. Regional data show that while many people are applying for food stamps, thousands don't get them. istockphoto.com.

The news:

More than 49 million people didn't have enough food in 2008, an increase of 13 million people to reach a record high, according to a new survey by the U.S. Department of Agriculture using U.S. Census data.

Behind the news:

Many people in Illinois qualify for food stamps and don't get them.

An estimated \$85 million in Supplemental Nutrition Assistance Program benefits went unclaimed in Chicago in 2007, according to a September report released by the Food Research and Action Center, a Washington, D.C.-based food policy group.

An estimated 141,843

people in Chicago qualified for food stamps in 2007 but didn't get them, according to the same report.

Some experts think they know why.

"The [Illinois Department of Human Services 1 offices are understaffed at the same time that the number of households who are seeking help has skyrocketed," said Diane Doherty, executive director of the Illinois Hunger Coalition.

"People are frustrated because they have to come back to apply and wait to get an interview, which is a requirement for food stamps," she said.

In addition, more people are applying, including the newly unemployed and those re-enrolling for another benefit cycle.

"I think it's pretty clear the need has gone up," said Evelyn Brodkin, a political science professor at the University of Chicago's School of Social Service Administration. It's unclear if the food stamp system can handle the increased case-load, Brodkin said.

On top of that, the food policy group's report shows more people need food. Nationwide, 20 percent of all people sampled said they worried they'd run out of food before getting more money. The response is reflected in the number of visits to area food pantries which increased by 26 percent from July through September, said Bob Dolgan, a spokesman for the Greater Chicago Food Depository.

-Christopher Pratt

Teens surveyed about violence

The news:

In November, a federal judge sided with a group of 11 students suing for their right to transfer out of Christian Fenger Academy High School. An honors student was beaten to death in a fight near the school in September.

Behind the news:

Problems with teen violence extend well beyond any single high school, according to a 2009 survey conducted with 574 black and Latino high school students in the city.

The survey, conducted in the summer by the Mikva Challenge, a Chicago-based nonprofit that works to get high school students involved in political processes, indicated the sense of danger teens feel in their neighborhoods. About 48 percent of respondents said violence is among the top three issues affecting young people today. And 66 percent of respondents said they would consider having federal troops in their neighborhoods to help control violence.

The survey also showed that many youth think high school is too late to start anti-violence interventions. More than 61 percent of survey respondents

Violence goes beyond school walls

About 48 percent of 574 youth surveyed by the Mikva Challenge, a Chicagobased nonprofit that works to get high school students involved in political processes, report that violence is among the top three issues affecting them, and many say the problem begins in middle school.

Survey results

Would consider stationing federal troops in their neighborhood	66%
Believe youth begin engaging in violence during middle school	61%
Think violence is among the top three issues affecting youth	48%

said young people become engaged in violence while they are in middle school, with about half of the respondents reporting grades 6 to 8 as the best years to work with youth to prevent violence.

It is tempting to shift the response to violence from constructive to punitive, said Jaime Arteaga, director of the Mikva Challenge Youth and Safety Council. "As an administrator, when you are faced

with such tragic and public scenarios as the one occurring at Fenger, your No. 1 focus is to no longer be in the news," said Arteaga, who helped conduct the survey. "You might be more compelled to arrest [students] so that there are no incidents that can be reported on the news, and you also close yourself off from community partners who matter."

—Amalia Oulahan

Mammography report stirs controversy

The news:

The U.S. Preventive Services Task Force in November recommended that women start getting mammograms at age 50 instead of 40, the age the task force recommended back in 2002.

Behind the news:

The task force no longer recommends mammograms during the period in which black women are most often diagnosed with breast

Nationally, the rate of diagnosis for black women younger than 45 is higher

than it is for any other racial or ethnic group. Among all ages, black women also have the nation's highest death rates from breast cancer.

"If I had followed the new guidelines, I wouldn't be here today," said Beverly Gavin, who was diagnosed with breast cancer at age 41.

Gavin, president of the Chicago chapter of Sisters Network, an African-American breast cancer group for survivors, said her organization cannot endorse the new recommendations. She said there's no way to know the impact they will have on the black community, particularly because the recommendations don't mention race.

The American Cancer Society is also continuing to recommend mammograms starting at 40.

Dr. Diana Petitti, vicechair of the task force, said that the task force did not specify subgroups such as race, but acknowledged that black women may have to have a different screening schedule.

"The fact that African-American women have a higher incidence rate for breast cancer at ages less than 45 years is not widely appreciated," Petitti said.

"Nor is it well-known that the prognosis for African-American women who develop breast cancer in their 40s is particularly poor, and that only part of the difference in outcome is due to lack of access to care. It was the hope of the task force that its recommendation might lead to more individualized risk assessment and tailored advice for women less than 50. African-American women might well be a group in whom the screening schedule would be different than for the average-risk women."

—Amalia Oulahan



Jacinda Bullie, front left, leads her students in yoga and movement exercises as part of Uptown's Kuumba Lynx drop-in arts program. **Photo by Christopher Danzig.**

Hip-hop hope

By Christopher Danzig

On a foggy November evening, students arrive early for Uptown's Kuumba Lynx drop-in arts program. Bright pink, blue and white graffiti covers the warehouse-like room's walls where the program happens, and soon, music blasts from a set of turntables. Teenagers chatter and practice their dance moves, while one lanky young man on a skateboard clatters across the floor.

All this, before Kuumba Lynx's co-executive director Jacinda Bullie officially kicks off the evening. Eventually, she ushers the students into a small dance studio attached to the main room and leads them in yoga exercises. Then the real fun begins. The 30-odd participants—ages 8 through mid-20s—break off into groups: Some work on their graffiti art, others head to the disc jockey tables and still others work on their break dancing. Bullie and another co-director Jaquanda Villegas also teach their pupils hip-hop spoken word and poetry performance.

Bullie founded Kuumba Lynx—a combination of the Swahili word for creativity and the name of a small cat with a big roar—in 1996 with Villegas and Leida Garcia. Bullie, an outspoken 33-year-old who is shorter than many of her students, has big curly hair and a voice hoarse from continually shouting over the rambunctious group. She was raised in Uptown during hip-hop's heyday, when she and the other co-founders all became involved in the culture through music as emcees, dancers and writers.

Bullie, whose stepfather was a Black Panther, saw community activism at a young age. She says early exposure to social justice work shaped the way she thinks. "It helped build our consciousness," she says.

Hip-hop's power to improve lives plays a big part in her identity. "A part of my culture is telling stories," she says, and she believes it's crucial for young people—especially in neighborhoods such as Uptown—to find and learn to use their own voices so they can take control of their lives.

To accomplish the organization's goals, Kuumba Lynx offers several programs. There are the drop-in arts programs several times a week in Uptown, community cultural events throughout the year, and arts residencies at schools and community centers across Chicago. Kuumba Lynx also runs a dance and theater ensemble, the organization's most intensive program.

In late November, Bullie sat down with *The Chicago Reporter* to talk about her program.

Why did you create Kuumba Lynx?

In 1996, there were a few things going on politically in our city. There was that anti-gang loitering ordinance that basically said kids couldn't stand around [in groups of] three or more. Also around that time, public schools were cutting lots of arts funding. We had all been connected, celebrating and utilizing hip-hop for our individual selves. But then also we were a part of community things—positive things—tutoring programs [and] sports programs that were about empowering young people, giving them a sense of purpose.

We found we were not really athletes, but that was the lead push in the community we were in. But we used hip-hop all the time. We were artists. We were writers. We started a pilot afterschool tutoring program in the schools we were teaching in. It started as a performance ensemble.

What motivates you in your work?

The imbalance that exists in our city and in our world. When I see that young people still don't feel like their voices matter, that they haven't learned to hold onto—to appreciate—their stories, to recognize that they have a role in the way their life goes. I see such a pull on young people, whether it's from media or from peer pressure, but I see this imbalance, and I see that they're not claiming their stories and their experiences and their voices.

Now more than ever, those have to be validated. First, by themselves and then by our global world. That's what motivates me—that there are untold stories, and there are experiences that our world needs to validate.

How has hip-hop culture changed since you started Kuumba Lynx?

Hip-hop has been commercialized. We all know that. With that, it's changed because it's part of the money game. Hip-hop had a marketable personality, but it's been co-opted by the commercial industry. Unfortunately, that industry perpetuates stereotypes, glamorizes wealth and impacts the masses' perception of hip-hop. It's money-driven; it's misogynistic. Really, it promotes violence and degradation of women. It allows people to look at hip-hop culture as not participatory in anything progressive.

How does that affect your work?

The way we respond is that we provide programs that really help to preserve and promote original hip-hip ideas. It doesn't mean we're 'Old-school! Old-school!' or we don't acknowledge some of these more commercially driven rappers.

When I say we preserve and promote it, I'm really talking about the original ideas and reason of hip-hop, which has always been about resistance, about self-determination, about community pride, about making constructive life choices. That's what our programming tries to encompass, while acknowledging that hip-hop is an ever-changing and growing culture.

It's growing up. When you grow up, you sometimes take a job you don't want to take. You make mistakes—you learn from them but you remember what your mama taught you. It's that

sort of experience that we're having in hip-hop.

In Kuumba Lynx programs, we're about trying to create that alternative to some of those ills that young people are dealing with

How is Kuumba Lynx different from other youth service programs in Chicago?

It's a movement for us. Though it's about youth development, it's also just a way in which the people leading the organization are living hip-hop culture. They're using hip-hop as a means to think about the way they spend their money. Using hip-hop to drive the curriculum we push for in our children's schools, the food that we eat, the businesses that we support, the things we do with our relaxation time, the things that we're committed to.

Not a cult, but a community concentrating on sustaining itself and specifically appreciating brown and black life, and those of marginalized or poor and underserved communities. And recognizing that those voices have to be acknowledged.

We are all living the work we do every day and creating families—because so many of our families have been destabilized. We are creating family structure. It's not like I punch in and out, or 'I got to go see my after-school program.' It's more like, 'This is a child I'm committed to for life.'

What is your favorite part of running Kuumba Lynx?

My favorite part is hearing young people's experiences, having them analytically think about issues that everyone's talking about, but asking them to think about how it connects directly to them and watching them form opinions about the way they want their lives to go, or starting to see the world outside of a box. And most importantly acknowledging what they do matters.

That's exciting to me—having the opportunity to use art as a vehicle to show growth and [see] that revelation happen through writing a poem or when you're in a footwork battle. You walk away and you're like, 'Wow, I killed it!'

It's not the success of winning a battle or making the dopest poem. That's beautiful—but it's that belief in yourself, and that sense of belonging you capture in the moments when you're creating art. The way that transcends later in life amazes me.

We're just now at the stage where we see the fruition of that because we had people who were in the program 10 years ago, who now are in college or who graduated from college. When they first came to Kuumba Lynx, they never thought about community, and now they want to be teachers or community organizers. Those are the kinds of things that make you proud: when you see the power of someone's voice being acknowledged.

What's the hardest part about leading the organization?

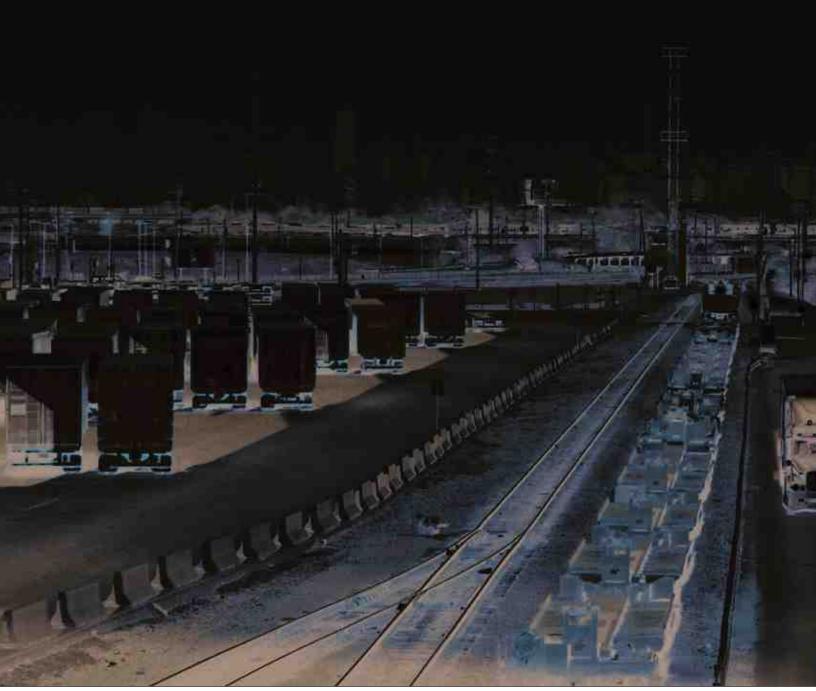
The hardest thing is seeing the unbalance—the economic unbalance, the social unbalance. It's hearing about parents who haven't had lights for two months. I don't mean to be the Grinch, but we [city government] hang up Christmas lights all across the city.

All of those kinds of inequalities are the hardest thing to swallow in this work. Because every day you are pushing for young people to have hope. Pushing for them to be the best they can be. Be a true reflection of your ancestry. But they open their eyes, read the paper, feel the experiences of their personal lives, and it's like, 'but other people aren't doing that.' And that's the most difficult thing.

Pollution from rail yard emissions in the Chicago area plagues the health of nearby residents

By Kari Lydersen

Power Points Residents within a half mile of rail yards could face a cancer risk more than 10 times higher on average than people four miles away. Residents near rail yards would also be expected to suffer asthma attacks and other respiratory and cardiac disease—and premature death—at a higher rate. About 57,000 people—a majority of them minority—live within a half mile of Chicago's 15 biggest "intermodal" rail yards, where shipping containers are transferred between trains and trucks or ships.



Chicago is one of the nation's worst areas for diesel pollution. It's estimated that in 2002, locomotives in the Chicago area emitted 23,000 tons of nitrogen oxide—the equivalent of 25 million cars. Photo by Robert Thornton.

n a crisp late afternoon in November, pickup basketball and a softball game are going strong in Cicero's Hawthorne Community Park. Nearby, a young girl plays in a yard, chasing a border collie with a plastic rake. The sounds of laughter and sports are underscored by a steady rumble, punctuated by loud honks and mechanical gasps. These are the sounds of the Cicero Intermodal Facility across the street, where giant cranes shift cargo containers between trains and trucks 24 hours a day, 365 days a year. It's one of the largest freight transfer points in the country's largest rail hub—one-third of U.S. rail freight passes through Chicago, and more rail freight passes through Illinois than any other state.

To the southeast of Hawthorne Park, one can see the twin smokestacks of the Crawford Generating Station coal-burning power plant. The plant has been the focus of local and national attention regarding the health risk posed by emissions of particulate matter, nitrogen oxide and other contaminants. But few people realize that the Cicero rail yard might be as much of a health risk as the coal plant to the surrounding largely Latino, low-income population.

Diesel exhaust from locomotives, trucks and other rail yard equipment is a likely carcinogen and contains similar components found in coal-burning power plant emissions: particulate matter, smog- and particulate-forming nitrogen oxide, carbon monoxide, sulfur dioxide and other toxic compounds. Diesel exhaust can be of particular concern since it is emitted



close to the ground and contains more of the ultrafine particles that can penetrate deep into the lungs and cross into the blood stream.

According to a *Chicago Reporter* analysis, residents within a half mile of the Cicero and other Chicago area rail yards could suffer a cancer risk more than 10 times higher on average than people four miles away.

Residents near rail yards would also be expected to suffer asthma attacks and other respiratory and cardiac disease—and premature death—at a higher rate. L. Bruce Hill, a senior scientist for the national advocacy group Clean Air Task Force, said cardiac disease is an even bigger concern than cancer, since particles from the exhaust can get into the blood stream and cause inflammation. "There's no safe limit for particles," he said. "Particulate is the most hazardous common pollutant in the air, and diesel trains, buses and trucks really release it where you breathe it."

More than 37,000 rail cars move through the Chicago area each day, carrying a wide range of commodities including coal, gravel, cement, automobiles, oil, gas, lumber, fertilizer, paper, asphalt, metals, minerals and shipping containers stuffed with all manner of consumer goods. According to the CREATE initiative, a partnership between the city and state governments, Amtrak, Metra, and freight rail companies, demand for rail transport through Chicago is expected to double in the next 20 years.

And the ill effects of such rail traffic are felt by nearby residents. The Reporter analysis shows that about 57,000 people—a majority of them minority—live within a half mile of Chicago's 15 biggest "intermodal" rail yards, where shipping containers are transferred between trains and trucks or ships.

John Paul Jones, chairman of the Sustainable Englewood Initiatives, said residents of Englewood—a low-income, African-American neighborhood on Chicago's South Side—have been concerned for their health since CSX Corporation opened a new rail yard a decade ago on the site of old rail tracks around 59th Street and Damen Avenue. Residents are worried both about the diesel exhaust from idling trains and coal dust blowing off uncovered trains. "The soot comes into their homes. People have family members who have died of cancer," Jones said.

There was opposition when CSX unveiled plans for the new facility. Ultimately, a community benefits agreement was drafted, stipulating that CSX pay about \$300,000 a year to the city, which then allocates the funds to residents for home repairs or other projects. Jones said community groups, rather than city officials, should control the funds, and that they should be spent on protecting people from air pollution.

Brian Urbaszewski, director of environmental health programs for Respiratory Health Association of Metropolitan Chicago, said that CSX and other rail companies could do more to reduce the emissions, noting that Chicago buses switched to cleaner fuel several years before the U.S. Environmental Protection Agency's rules forced them to do so.

CSX officials said that at the Englewood yard, and in general, they have taken great steps to reduce their emissions and said they are bringing structural and landscaping improvements to an otherwise decrepit, vacant swath of land and employing 50 local residents.

Carl Gerhardstein, CSX's environmental systems director, said the company is also in the process of installing pollution controls on all its locomotives and buying newer, cleaner locomotives. "We really are committed to reducing our impact," he said. "We've done a lot of upgrades to reduce emissions on our fleet, and we continue to do more."

Steven Forsberg, spokesman for Burlington Northern Santa Fe Railway, echoed Gerhardstein's point. "The rail industry already invests a greater percentage—typically 17 percent to 20 percent, compared to 12 percent or less for other industries—of our revenues in capital investments in new equipment, technology, infrastructure and facilities than any other industry in the economy," he said. "We have even gone so far as to invest in promising experimental technologies, such as

Tests reveal unsafe air at Union Station

ir pollution might be the last thing on busy commuters' minds as they wait for trains to pull into Union Station. But inside Union Station, on the platform and even inside the train, people are exposed to particulate matter at levels far exceeding what the U.S. Environmental Protection Agency considers safe, according to testing done by the Clean Air Task Force commissioned by Respiratory Health Association of Metropolitan Chicago last year.

Clean Air Task Force senior scientist L. Bruce Hill found particulate matter at concentrations of 844 micrograms per cubic meter on the Union Station platform and 192 micrograms per cubic meter inside the station. The EPA considers a daily average exposure over 35 micrograms per cubic meter unsafe.

There is no EPA standard for even smaller ultrafine particles, but scientists are now increasingly concerned about their health impact. Hill found 500,000 such particles per cubic centimeter on the platform and 148,000 particles per cubic centimeter inside the station which he called "really extreme levels."

Nationwide most attention to the health and environmental hazards of locomotives has been pointed at the freight sector. But with some exceptions, like the electric South Shore commuter line, passenger trains also burn the same diesel fuel and raise serious health issues for passengers and communities surrounding rail facilities.

Not only are passengers and workers exposed at the station and on the platform, exhaust is also sucked into the train and then contained in the cars. "When the doors close and the train pulls out, it's essentially a smoky box on wheels," said Brian Urbaszewski, director



Commuters who ride passenger trains such as the Metra and Amtrak are exposed to "really extreme levels" of unhealthy particulate matter. Photo by Christopher Danzig.

of environmental health programs for Respiratory Health Association of Metropolitan Chicago. "The smoke stays inside the train car, and people are breathing it for a prolonged period of time."

"You can literally see the air" at Union Station at rush hour, Urbaszewski continued. "It's blue with diesel exhaust. Literally tens of thousands of people are getting a nice hefty dose of diesel exhaust."

While freight companies are private and can only be forced to do things through laws or regulations, passenger lines like Metra and Amtrak are essentially government-run. Urbaszewski notes that government officials could decide to

burn cleaner fuel and install more pollution controls on trains.

Chicago planners are also hoping to launch a regional high-speed passenger rail project, with trains going 110 or 220 miles per hour, either on existing or new tracks. They say this would improve air quality as a whole, since it would mean fewer cars on the road. High-speed rail advocates are hoping for some of the \$8 billion in stimulus funds the federal government has promised for high-speed rail nationwide. Since the locomotives would be new, they would likely have top-ofthe-line pollution controls and would burn the cleaner diesel fuel.

—Kari Lydersen

the hydrogen fuel cell locomotive we have recently been field testing in Los Angeles."

n California, rail yards have long been targeted by government authorities and environmental groups as major sources of debilitating air pollution. In recent studies, the California Air Resources Board quantified fine particulate emissions at seven intermodal yards and estimated the correlated increased risk of cancer.

In 2005, the yards studied had between 200,000 and 1.3 million "lifts"—the measure of how many times a cargo container is moved. The board found that residents within a half mile of rail yards would face a cancer risk of 50 to 250 in 1 million people, with the bigger yards creating the bigger risks. By four miles away, chances dropped to less than 10 in 1 million for most yards, meaning residents within a half mile of these rail yards had cancer risks five to 25 times greater than those four miles away.

According to a recent report by the Chicago Metropolitan Agency for Planning, the Chicago area had 15 intermodal facilities that had more than 200,000 lifts in 2006, the latest year for which the data are available. The Reporter analysis shows that, on average each of the 15 yards recorded nearly 375,000 lifts that year—topped by more than 900,000 lifts at the CSX facility in Bedford Park. The Cicero yard recorded 533,000 lifts, while the Englewood yard had 217,000.

The average number of lifts recorded at the 15 yards puts them closest to the Union Pacific Railroad's Commerce Yard in California—which had 345,000 lifts a year. Residents within a half mile of the Commerce facility faced a cancer risk of 100 per 1 million people. Four miles away from the yard, the number dropped to less than 10 per 1 million.

The Bedford Park yard was closest to the Union Pacific's Intermodal Container Transfer Facility/Dolores facility in California—which had 750,000 lifts. People within a mile of the Union Pacific's facility were estimated to suffer 100 cases of cancer per 1 million people, but the number went down to 25 cases for people within two miles.

he locomotives that haul shipping containers from China, coal from Wyoming, ethanol from Iowa and countless other commodities through the Chicago area burn a much dirtier diesel fuel than trucks, containing up to 500 parts per million sulfur, whereas trucks since 2006 have been limited to fuel with 15 parts per million sulfur.

The EPA has listed diesel exhaust as a likely carcinogen and says pollutants in diesel lead "to serious public health problems that include premature mortality, aggravation of respiratory and cardiovascular disease, and aggravation of existing asthma, acute respiratory symptoms and chronic bronchitis."

"It's a combination—you're not just getting one bad thing; you're getting lots of bad things," said Janice Nolen, American Lung Association's assistant vice president for national policy and advocacy. "The more we learn, the worse it looks. It can shorten lives by months to years, not just for old people and infants. It can cause asthma attacks, cause people with lung disease to have real trouble breathing; it's linked to heart attack and stroke. The pollution from some of these sources has been associated with children having less lung growth."

Chicago is already one of the nation's worst areas for diesel pollution. The Clean Air Task Force projects that, in 2010, Cook County residents will suffer 540 premature deaths, 707 nonfatal heart attacks, 11,459 asthma attacks and 67,603 lost work days each year because of diesel emissions, from trucks, ships, construction machinery and trains.

A 2006 report called "Smokestacks on Rails" by the Environmental Defense Fund, a New York-based nonprofit, estimated that locomotive emissions would be responsible for more than 3,000 premature deaths, more than 4,000 nonfatal heart attacks, more than 60,000 cases of acute bronchitis and exacerbated asthma in children nationwide. It noted this is of particular concern in places like Chicago that are regularly out of compliance with national standards for particulate matter and ozone. The report estimated that in 2002, Chicago-area locomotives emitted 23,000 tons of nitrogen oxide—the equivalent of 25 million cars—and 792 tons of particulate matter.

But railroad industry officials are quick to point out that rail is a more efficient and overall more environmentally friendly mode of transportation for both goods and people than trucks, planes or cars. Burlington Northern Santa Fe Railway says each of its 6,700 locomotives nationwide moves as much freight as 280 trucks, carrying a ton of freight 423 miles on just one gallon of fuel. "We know that for the whole nation, railroads carry more tonnage than any other source and have the smallest percent of emissions," Forsberg said.

Forsberg added that his company has received the highest score for environmental performance under the EPA's Smart-Way program and is investing heavily to install idling reduction technology on all its locomotives, with about 70 percent already outfitted.

But rail emissions are not spread evenly across the country.

Diesel in the air

More than 57,000 people—a majority of them minority—reside within a half mile of the Chicago area's 15 biggest "intermodal" rail yards. On average, each yard emitted 11 tons of particulate matter annually.



Note: Union Pacific's Global III rail yard and Burlington Northern Santa Fe's Logistics Park are not shown on the map.

Rail yard emissions

Name	Company	Lifts	Particulate Matter
1. Bedford Park	CSX	918,680	28 tons
2. Corwith	BNSF	757,000	23 tons
3. Willow Spring	BNSF	698,000	21 tons

Methodology

The Chicago Reporter examined particulate matter emissions and their potential effects at the Chicago area's 15 biggest "intermodal" rail yards—where goods are transferred between trains and trucks—by analyzing statistics from two studies. The data on "lifts"—the measure of how many times a cargo container is moved—in 2006 were obtained from a report by the Chicago Metropolitan Agency for Planning. They were compared with emission figures and corresponding cancer-risk assessments for California yards studied by the California Air Resources Board.

The resulting findings for Chicago yards are rough estimates, as numerous variables, such as wind patterns and specific types of equipment used, play into the amount and dispersion of particulate matter emitted per lift in the surrounding community.

But it is reasonable to expect that emissions from Chicago rail yards would present cancer risks for nearby residents as found in California, said Andrea Hricko, associate professor at the University of Southern California's Keck School of Medicine.

Hricko pointed out that, if anything, this method might underestimate the emissions in Chicago since California has been more progressive in implementing locomotive emission reductions.



John Paul Jones, chairman of the Sustainable Englewood Initiatives, says the intermodal rail yard on 59th Street in West Englewood is a health concern for residents in the area. **Photo by Christopher Danzig.**

While a train chugging over the open prairie has a minimal health impact, neighbors of rail yards get constant and large doses of diesel exhaust.

The Chicago metro area's major rail yards are primarily near minority neighborhoods on the South Side, including Back of the Yards, Brighton Park, Englewood, Roseland and south suburban Bedford Park. Several mostly white, solidly middle-class suburbs also host large rail yards, including Schiller Park, Northlake and Willow Springs, a community with one of the region's largest rail yards: a Burlington Northern Santa Fe Railway facility that handles freight from a nearby UPS site.

Areas surrounding rail yards were generally not immigrant or minority neighborhoods when the rail yards were built; many would not even have been inside the city when they were constructed. "Transportation facilities don't control how close residences are built [around rail yards]—the cities do," Forsberg said.

Martha Jungenberg, program director of Special Service Area 13, which provides services like security and landscaping to businesses in the stockyards strip of Back of the Yards, said rail is crucial to the area's economy, with companies locating there to make use of rail spurs backing up to their warehouses. She lives nearby in Bridgeport and says many local businesses are annoyed by trains blocking roads but are not aware of the health effects.

"Rail is definitely needed but it should be cleaner," she said. "[Rail companies] probably do have the money to do whatever

they need to to be responsible, so I think they should do it."

o what can be done to make rail yards cleaner? EPA rules passed in 2008 mandate locomotives burn cleaner fuel starting in 2012 and require cleaner-burning engines for new locomotives starting in 2015. But the strictest EPA rules don't apply to existing locomotives—many built decades ago and still going strong. "It will take a long time" for the rule to make a difference, said the American Lung Association's Nolen. "These things don't get turned over frequently, these engines last for a long time."

Urbaszewski of Respiratory Health Association of Metropolitan Chicago said rail companies could voluntarily do various things right now to significantly reduce their emissions. "There's some low-hanging fruit—and fruit higher up the tree as well," he said. "The easiest things to do are to use the cleanest fuel possible and limit idling. Locomotives aren't really required to use cleaner fuel until 2012, but it is widely available now."

Urbaszewski's group and its partners in the clean air movement have been pushing rail companies to voluntarily replace dirty old locomotives with cleaner new ones, and with Citizen Action/Illinois they have encouraged companies to apply for federal funds to help cover costs, including through the Congestion Mitigation and Air Quality federal program.

Meanwhile, CREATE members have drafted an elaborate plan to increase rail infrastructure and reduce rail bottlenecks

An idle question

Illinois company develops engine to reduce emissions

By Kari Lydersen

t National Railway Equipment Company in south suburban Dixmoor, an old yellow locomotive wheezes into action. The noise makes conversation nearly impossible, and thick plumes of diesel exhaust permeate the air. Thousands of locomotives like this pull millions of tons of freight across the country each day, and in the process cause thousands of premature deaths and myriad other health problems, according to the Environmental Defense Fund, a New York-based nonprofit.

Railroads have long flown under the radar of government regulators and environmental advocates who have focused more on truck and car emissions and other sources of pollution like power plants. But now pressure is increasing on rail companies to reduce their emissions, and a number of technologies are in the works to help them do so.

One of these is the N-ViroMotive GenSet, a locomotive that uses three engines instead of one, so when idling or working in a rail yard, it can use only as much power as needed, avoiding unnecessary emissions.

At National Railway's Dixmoor facility, an engineer fires up a shiny red, white and blue GenSet. This familyowned Illinois company began making GenSets to meet California's relatively strict emissions standards. Now they are finding a nationwide market. The GenSet contains up to four 700 horse-

power engines instead of the one 2,100 horsepower motor, which is typical in switcher or regional haul locomotives. Other "smart" and "green" features further reduce emissions and prevent unnecessary idling.

After an initial burst of smoke, no emissions can be seen or smelled. The noise is much less than the yellow engine. Vice President Jim Wurtz said the GenSet emits about 90 percent less nitrogen oxide and particulate matter and burns about half the fuel of a traditional engine. And at an average of about \$1.65 million, it doesn't cost much more than

way to reduce emissions. The EPA estimates long-haul locomotives spend 12.5 percent of their time idling, and in-yard switchers 60 percent.

In 2002 and 2003, Chicago was the site of a successful pilot program in anti-idling technology manufactured by the Washington-based Kim Hotstart Company. Locomotives were outfitted with technology to reduce idling in the winter, when their engines are often left running to prevent radiator fluid from freezing and to keep the cab warm. Diesel engines have a hard time starting in cold weather, hence many trucks

After an initial burst of smoke, no emissions can be seen or smelled.

an overhauled or new traditional engine.

In the past three years, the company has sold about 300 of these locomotives, according to Wurtz, and when the economy picks back up, he expects business to boom. Several other companies are using similar technology, though industry officials say National Railway is the clear leader.

Various other clean engine technologies are being rolled out around the country. In September, Norfolk Southern, along with U.S. Secretary of Transportation Ray LaHood, unveiled an electric locomotive that runs on roughly 1,000 12-volt batteries instead of diesel. It can be plugged in or recharged while running.

Curbing idling is another important

and other diesel-fueled machines typically leave their engines idling. But the Hotstart technology uses special small engines to keep radiator and lubricating fluids warm so the locomotive doesn't have to idle.

Wurtz laments the slow pace of change in the railroad industry, but he thinks growing awareness of environmental issues could push new technology over the edge. "This is a sleepy industry," he said. "We're just a bunch of gearheads who enjoy putting together locomotives. [GenSet development] wouldn't have happened if it weren't for California passing stricter standards. Five years later, we have a locomotive that is the world's leader in [decreased] noise and emissions."

and related highway traffic by separating tracks from streets or adding new tracks. This should reduce both highway and locomotive emissions, since cars, trucks and trains would all spend less time caught in traffic, said Emily Tapia-Lopez, transportation associate for the Metropolitan Planning Council. "It's really about looking at the problem in a holistic manner, looking at transportation as a comprehensive strategy, not in separate silos," she said.

Andrea Hricko, associate professor and director of community outreach and education for the Southern California Environmental Heath Sciences Center at the University of Southern California's Keck School of Medicine, thinks Chicagoans need to pay closer attention to the issue.

"Much more attention needs to be paid to reducing emis-

sions at existing rail yards and ensuring that new rail yards are not built near homes and schools," she said, noting that California community groups have been struggling with this issue for years.

Community activism in California has played a significant role in shaping policy and pushing for railroad industry changes. In fact, the Air Resources Board studies were conducted largely because of pressure from groups concerned about rail yard pollution affecting minority neighborhoods.

Jones said a similar approach is needed on Chicago's South Side. "We have so much else going on in Englewood, it's not a top priority," he said. "But we need to make it a priority."

editor@chicagoreporter.com

COMMUNITYRENEWALSOCIETY

332 S. Michigan Ave., Suite 500 Chicago, IL 60604-4306

Moving? Return your label with new address.

CHANGE SERVICE REQUESTED

Nonprofit Organization U.S. Postage PAID Carol Stream, Illinois Permit No. 87

PARTING SHOT Humboldt Park



December 5, 2009